

L8 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN  
 AN 1999:380714 CAPLUS  
 DN 131:60091  
 ED Entered STN: 21 Jun 1999  
 TI Primer compositions, film formation and corrosion- and scratch-resistant pre-coated metals therefrom  
 IN Ohgami, Toshihiko; Okai, Toshihiro; Takeichi, Hisashi; Tozaki, Yoichi  
 PA Nippon Paint Co., Ltd., Japan  
 SO Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 IC ICM C09D201-00  
 ICS B05D001-36; B05D007-14; C09D005-00; C09D005-08; C09D007-12;  
 C09D161-20; C09D175-04; C08G018-80  
 CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 55, 56  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 11158436	A2	19990615	JP 1997-328576	19971128 <--
PRAI JP 1997-328576		19971128		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 11158436	ICM	C09D201-00
	ICS	B05D001-36; B05D007-14; C09D005-00; C09D005-08; C09D007-12; C09D161-20; C09D175-04; C08G018-80

AB Title compns. comprise 100 parts polymers consisting of 100:10-100 film-forming resins and aminoplasts and/or blocked polyisocyanates, 1-150 parts chromate-based anticorrosive pigments, 0.5-100 parts phosphite salt-based anticorrosive pigments, and 0.1-50 parts anion- or cation-exchanged inorg. powders. An Al/Zn alloy-plated steel plate was primed with a composition containing Vylon 300 100, Sumimal M 40S 20, a sulfonic acid catalyst 0.5, Sr chromate 80, Expert NP 1020C (Zn Ca phosphite) 10, TiO<sub>2</sub> 30, and Na<sub>3</sub>VO<sub>4</sub>-treated DHT-4 10 parts to a 6-μm thickness and coated with a polyester to form a pre-coated plate showing good anticorrosion at edges and cut areas and scratch resistance.  
 ST anticorrosion edge precoated metal primer compn; scratch resistance precoated metal primer compn; primer chromate phosphite pigment precoated metal; ion exchanged inorg filler primer precoated metal  
 IT Nepheline syenite  
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
 (Minex 7, filler; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)  
 IT Primers (paints)  
 (anticorrosive; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)  
 IT Chromates  
 Phosphites  
 RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
 (chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)  
 IT Aminoplasts  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)  
 IT Epoxy resins, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT Polyesters, uses  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT Acrylic polymers, uses  
Clays, uses  
Diatomite  
Fluoropolymers, uses  
Glass fibers, uses  
Kaolin, uses  
Mica-group minerals, uses  
Phenolic resins, uses  
Polyamides, uses  
Polyolefins  
Polysiloxanes, uses  
Polyurethanes, uses  
Silicates, uses  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
(filler; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT Fillers  
(ion-exchanged; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT Galvanized steel  
Metals, miscellaneous  
RL: MSC (Miscellaneous)  
(substrates; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 25035-04-5, Nylon 11  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
(Orgasol 2002EXG, filler; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 227605-13-2, Shieldex CP 4-7394  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)  
(chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 7789-06-2, Strontium chromate 136879-28-2 227605-52-9, Expert NP 1020C-N1  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
(chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 9003-08-1, Sumimal M 40S 25068-38-6, Epo Toho YD 7020 29294-36-8, Vylon 300 227471-05-8, Coronate 2536-Epo Toho YD 7020 copolymer  
RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 471-34-1, Calcium carbonate, uses 1313-13-9, Manganese dioxide, uses 1332-37-2, Iron oxide, uses 1344-95-2, Calcium silicate 7631-86-9, Silica, uses 7727-43-7, Barium sulfate 9004-34-6, Cellulose, uses 13397-24-5, Gypsum, uses 14807-96-6, Talc, uses 14808-60-7, Quartz, uses  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)

(filler; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 7429-90-5, Aluminum, uses  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
(flake, filler; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 7632-00-0, Sodium nitrite 13721-39-6, Trisodium vanadate  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)  
(hydrotalcite treated with; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 69048-27-7, DHT-4  
RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PROC (Process); USES (Uses)  
(ion-exchanged; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 28962-53-0  
RL: MOA (Modifier or additive use); POF (Polymer in formulation); USES (Uses)  
(pigment; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 11149-84-1  
RL: MSC (Miscellaneous)  
(platings, on steel, substrates; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

IT 12597-68-1, Stainless steel, miscellaneous  
RL: MSC (Miscellaneous)  
(substrates; chromate and phosphite pigment- and ion-exchanged inorg. filler-containing primers for formation of pre-coated metals)

RN 25035-04-5  
RN 227605-13-2  
RN 7789-06-2  
RN 136879-28-2  
RN 227605-52-9  
RN 9003-08-1  
RN 25068-38-6  
RN 29294-36-8  
RN 227471-05-8  
RN 471-34-1  
RN 1313-13-9  
RN 1332-37-2  
RN 1344-95-2  
RN 7631-86-9  
RN 7727-43-7  
RN 9004-34-6  
RN 13397-24-5  
RN 14807-96-6  
RN 14808-60-7  
RN 7429-90-5  
RN 7632-00-0  
RN 13721-39-6  
RN 69048-27-7  
RN 28962-53-0  
RN 11149-84-1  
RN 12597-68-1

L8 ANSWER 2 OF 3 WPIX . COPYRIGHT 2005 THE THOMSON CORP on STN  
AN 1999-400368 [34] WPIX  
DNN N1999-299572 DNC C1999-118438  
TI Primer composition for precoated metals, coat formation and coated articles - comprises film forming resin, curative, chromate anticorrosive

paint, phosphite anticorrosive paint and ion exchanger inorganic powder.  
DC A21 A23 A82 G02 M13 P42  
PA (NIPA) NIPPON PAINT CO LTD  
CYC 1  
PI JP 11158436 A 19990615 (199934)\* 13 C09D201-00 <--  
ADT JP 11158436 A JP 1997-328576 19971128  
PRAI JP 1997-328576 19971128  
IC ICM C09D201-00  
ICS B05D001-36; B05D007-14; C09D005-00; C09D005-08; C09D007-12;  
C09D161-20; C09D175-04  
ICA C08G018-80  
AB JP 11158436 A UPAB: 19990825

Primer compsn. for precoated metals is produced by mixing a curable resin compsn. consisting of (a) a film-formable resin and (b) 10-100 pts.weight per 100 pts.weight solid of the film-formable resin of a curative made up of an amino resin and/or a blocked isocyanato cpd. with (c) 1-150 pts.weight of at least one chromate anticorrosive paint, (d) 0.5-100 pts.weight of an anticorrosive paint consisting mainly of phosphite powder and (e) 0.1-50 pts.weight of an ion exchanger inorganic powder with the anions or cations ion-exchanged per 100 pts.weight solid of the curable resin compsn.

USE - For galvanised sheet steel, Al/Zn alloy-plated sheet steel, Zn/Al alloy-plated sheet steel, Zn/Fe alloy-plated sheet steel, Al-plated sheet steel, Al plate and stainless steel sheets.

ADVANTAGE - The primer compsns. can increase anticorrosive properties at ends, cut portions and processed portions of precoated metals and can give precoated metals with excellent scratch resistance.

Dwg.0/0

FS CPI GMPI  
FA AB  
MC CPI: A05-B01; A08-D04A; A12-B04C; G02-A05E; M13-H05

L8 ANSWER 3 OF 3 JAPIO (C) 2005 JPO on STN  
AN 1999-158436 JAPIO  
TI PRIMER COMPOSITION FOR PRECOATED METAL, METHOD FOR FORMING COATING FILM, AND COATED OBJECT  
IN OGAMI TOSHIHIKO; OKAI TOSHIHIRO; TAKEICHI HISASHI; TOZAKI YOICHI  
PA NIPPON PAINT CO LTD  
PI JP 11158436 A 19990615 Heisei  
AI JP 1997-328576 (JP09328576 Heisei) 19971128  
PRAI JP 1997-328576 19971128  
SO PATENT ABSTRACTS OF JAPAN (CD-ROM), Unexamined Applications, Vol. 1999  
IC ICM C09D201-00  
ICS B05D001-36; B05D007-14; C09D005-00; C09D005-08; C09D007-12;  
C09D161-20; C09D175-04  
ICA C08G018-80  
AB PROBLEM TO BE SOLVED: To obtain a primer composition which can give a precoated metal improve in anticorrosiveness in an edge, a cut part and a processed part and being excellent in scratch resistance.

SOLUTION: 100 pts.weight (in terms of the solids content) curable resin composition containing a film-forming resin (a) and a curing agent (b), comprising 10-100 pts.weight, per 100 pts.weight (in terms of the solid content)

above film-forming resin, amino resin and/or blocked isocyanate is incorporated with 1-150 pts.weight at least one chromate rust-preventive pigment (c), 0.5-100 pts.weight rust-preventive pigment based on a phosphite powder (d), and 0.1-50 pts.weight ion exchanger inorganic powder whose anions or cations are ion-exchanged (e). To further improve the scratch resistance, the composition may further contain 1-30 pts.weight inorganic substance particles and/or 0.5-10 pts.weight organic polymer particles (f).

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